

May 21, 2007

**VIA CERTIFIED MAIL**

Mary Logan  
U S EPA Region V (SR-6J)  
77 W Jackson Boulevard  
Chicago, IL 60604-3590

Sheila Abraham  
Ohio EPA - NE District Office  
Div Of Emergency & Remedial Response  
2110 East Aurora Road  
Twinsburg, OH 44087

Remedial Response Section Manager  
Ohio EPA - DERR  
P O Box 1049  
Lazarus Government Center Office  
122 South Front Street  
Columbus, OH 43216-1049

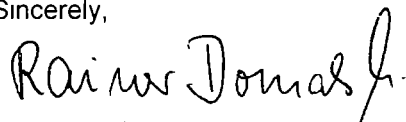
**Re: APRIL 2007 MONTHLY REPORT  
RI/FS & REMEDIAL DESIGN & REMOVAL ACTION  
NEASE CHEMICAL SITE  
SALEM, OHIO**

In accordance with Paragraph X E of the Administrative Order by Consent regarding a Remedial Investigation/Feasibility Study (RI/FS) of the Nease Chemical Site in Salem, Ohio, attached is a copy of the April 2007 RI/FS Progress Report. This report also includes the monthly progress report for the remedial design (OU-2) in accordance with Paragraph X of the Administrative Order on Consent, effective as of May 10, 2006.

Additionally, in accordance with Paragraph 14 of the Administrative Order by Consent, signed December 17, 1993, attached is a copy of April 2007 Removal Action Progress Report.

As agreed by Mary Logan, US EPA, this report was submitted after the 10<sup>th</sup> calendar day of the month.

Sincerely,



Dr. Rainer F. Domalski  
Site Coordinator

Enclosures

cc. M Hardy/Heidi Goldstein – Thompson Hine  
Steve Finn – Golder Associates, Inc

052107



**RUTGERS Organics Corporation**

201 Struble Road  
State College, PA 16801

Phone 814-238-2424  
Fax 814-238-1567  
web-site <http://RUETGERS-ORGANICS-CORPCOM>

Member of the RUTGERS Chemicals Group

US EPA RECORDS CENTER REGION 5



397221

**NEASE CHEMICAL SITE, SALEM, OHIO  
REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
REMEDIAL DESIGN (OU-2)  
MONTHLY PROGRESS REPORT  
APRIL 2007**

**1. INTRODUCTION**

This progress report has been prepared in accordance with Paragraph XE of the Administrative Order of Consent (AOC) regarding a Remedial Investigation/Feasibility Study (RI/FS) and Paragraph X of the Administrative Order on Consent regarding the Remedial Design (RD/OU-2) of the Nease Chemical Site in Salem, Ohio. The report summarizes the major RI/FS and RD actions during the month along with investigation results and any problems encountered in the project. Activities planned for next month are also presented.

**2 SUMMARY OF ACTIVITIES PERFORMED**

**2.1 PROJECT ACTIVITY SUMMARY**

The activities that were initiated and/or completed during the month are described. All activities were performed in accordance with the detailed protocol provided in the approved Work Plan.

**2.2 FIELDWORK**

**2.2.1 RI/FS**

The floodplain soil samples taken in September 2006 were analyzed by OEPA lab for mirex. The results were then validated by Golder.

**2.2.2 RD (OU-2)**

According with the PDI workplan the following work was accomplished during this month:

- NZVI Field Pilot Study
  - Submitted Week 8 and Week 12 groundwater sampling results to the Agencies on April 9. Submitted a proposal on April 23 to collect an additional round of sampling from the NZVI pilot wells. The proposal was approved by the Agencies on April 25.
- Southern Groundwater Assessment – Sampling of NAPL was completed on March 22 at TW06-21. The preliminary results were submitted to the Agencies on April 30 along with a proposal to pump NAPL and evaluate recoverability.
- Soil Conditions Extent of Mirex - Preliminary mirex results were received on March 12. The analytical data packages were received from all three laboratories (STL, Exygen and Ohio EPA) in early April. Commenced with the validation of the analytical data packages.

## 2.3 Reports

### 2.3.1 RI/FS

In preparation of the upcoming Feasibility Study (FS) for OU-3 (Feeder Creek, MFLBC), the agencies and ROC agreed on additional sampling in the MFLBC including sediment, fish, surface water and flood plain soil to have a sufficient data base for the study. The first step, the reconnaissance of sediment bodies in the MFLBC, was performed from August 1 through 15, 2005. Sediment and fish samples were taken in the week of October 10, 2005, the surface water samples in the last October week. The analytical results of the samples taken were validated by the ROC's technical consultant and submitted to the agencies. Sampling locations for the flood plain soil were determined. ROC has obtained an access agreement with the owners. The actual sampling was conducted in the week of September 18, 2006.

The technical team consisting from representatives of U.S. EPA, Ohio EPA, Golder and ROC had a kick-off meeting on September 27, 2006 in Columbus, Ohio, to commence the work on the Feasibility Study (FS) for the Feeder Creek and MFLBC. A follow-up meeting was conducted on December 13, 2006 discussing potential cleanup goals and methods. On March 27, 2007, U.S. EPA provided ROC with a memo regarding preliminary remediation goal for sediments in MFLBC.

### 2.3.2 RD (OU-2)

The results of the ongoing PDI field investigation and lab studies are discussed in frequent conference calls between the agencies, ROC and its technical consultant.

Vapor Intrusion – Sampling at residential properties located at 1229 and 1235 Benton Road was completed on March 20, 21, and 22. The data was validated and the results were submitted to the Agencies on April 30. A conference call was held with the Agencies to discuss results and it was agreed that it would be a prudent pro-active measure to install a system that would prevent sub-slab vapors from entering the homes.

S/S/S Treatability Study – Comments on the Technical Memorandum (TM) providing status update of the S/S/S, including Phase III results and proposal for final phase Study (Phase IV) were received from the Agencies on April 5. A conference call was held on April 13 to discuss the Agency comments. Commenced with preparation of response to comments and a revised TM.

Bio-Treatability Study of Benzene in Groundwater – Received comments on April 5 from the Agencies on the proposal for Biotreatability Study for Benzene submitted on March 22. A conference call was held on April 13 to discuss Agency comments. Commenced with preparation of response to comments and revised proposal for Biotreatability Study for Benzene.

PDI Report - Technical Memorandum – Baseline Conditions – Golder is currently preparing the baseline condition report.

## 2.4 MEETINGS

None.

## 3 VARIATIONS FROM THE APPROVED WORK PLAN

None.

#### **4 RESULTS OF SAMPLING, TESTS AND ANALYSES**

The results from the sampling were and will be provided to the agencies in specific reports

#### **5 PROJECT SCHEDULE**

The current Work Plan schedule identifies completion and target dates for project activities. Those scheduled to occur over the next several months include:

- Feasibility Study OU-3 (Feeder Creek, Middle Fork of Little Beaver Creek)
- Continue PDI field/lab work (NZVI sampling) as well as preparation of PDI Report

#### **6 DIFFICULTIES ENCOUNTERED AND ACTION TAKEN TO RESOLVE PROBLEMS**

No significant difficulties were encountered.

#### **7 PERSONNEL CHANGES**

None

#### **8 ANTICIPATED PROJECT ACTIVITIES FOR APRIL 2007**

- Monthly Progress Report March 2007
- RI/FS
  - OU-3 Feasibility Study
  - Data Validation for soil samples recovered during the floodplain sampling in September 2006
- RD (OU-2)
  - NZVI Field Pilot Study
    - Conduct an additional round of groundwater sampling from the NZVI pilot study wells
    - Submit a revised Biotreatability Study for Benzene. Pending Agency comments proceed with the Study
  - S/S/S Treatability Study – Submit a revised TM Pending Agency comments proceed with the final phase of the Study (Phase IV)
  - Vapor Intrusion – Discuss results and proposal to install a system to prevent sub-slab vapors with the residencies at 1229 and 1235 Benton Road
  - Southern Groundwater Assessment – Pump NAPL from TW06-21 and evaluate recoverability of NAPL. The results from this study will be used to evaluate interim measures for removal of NAPL.
  - Soil Conditions. Extent of Mirex – Complete validation and submit results of the mirex sampling.
  - PDI Report - Technical Memorandum – Baseline Conditions – Continue with preparation of the baseline condition report

**TABLE 1**  
**NEASE CHEMICAL SITE, SALEM, OHIO**  
**RI/FS AND RD (OU-2) SCHEDULE**

DATE	TASK/ACTIVITY/DELIVERABLE/MILESTONE	
	RI/FS	RD (OU-2)
	Documentation of the Site Activities through July 31, 2004 can be reviewed in the July 2004 Monthly Progress Report	
August 30, 2004	US EPA Region V/ OEPA approve Endangerment Assessment	
September 1, 2004	Draft Feasibility Study (OU-2) submitted to the agencies for review	
September 9, 2004	Submit Monthly Progress Report	
September 13, 2004	Submit Final Revision to Endangerment Assessment	
October 8, 2004	Submit Monthly Progress Report	
November 10, 2004	Submit Monthly Progress Report	
November 22, 2004	Received Agencies' comments for draft FS (OU-2)	
December 10, 2004	Submit Monthly Progress Report	
January 10, 2005	Submit Monthly Progress Report	
February 10, 2005	Submit Monthly Progress Report	
March 1, 2005	Final Draft Feasibility Study (OU-2) submitted to agencies for review	
March 4, 2005	Submit Monthly Progress Report	
April 8, 2005	Submit Monthly Progress Report	
April 21, 2005	US EPA Region V/OEPA approve Final Feasibility Study for OU-2	
May 9, 2005	Submit Monthly Progress Report	
May 31, 2005	US EPA Region V published the Proposed Remedial Action the OU-2 (onsite)	
June 9, 2005	Submit Monthly Progress Report	
July 8, 2005	Submit Monthly Progress Report	
August 10, 2005	Submit Monthly Progress Report	
Aug 1 – 15, 2005	MFLBC – Reconnaissance of sediment bodies	
September 9, 2005	Submit Monthly Progress Report	
September 29, 2005	US EPA Region V signs Final Record of Decision for OU-2	
October 10, 2005	Submit Monthly Progress Report	

DATE	TASK/ACTIVITY/DELIVERABLE/MILESTONE	
	R/FS	RD (OU-2)
November 9, 2005	Submit Monthly Progress Report	
December 8, 2005	Submit Monthly Progress Report	
January 9, 2006	Submit Monthly Progress Report	
February 8, 2006	Submit Monthly Progress Report	
March 15, 2006	Submit Monthly Progress Report	
April 10, 2006	Submit Monthly Progress Report	
May 8, 2006	Submit Monthly Progress Report	
May 10, 2006		Administrative Order on Consent for OU-2 Remedial Design effective
May 25, 2006		Submittal of draft PDI Workplan
June 8, 2006	Submit Monthly Progress Report	
June 9, 2006		ACO Financial Assurance – Trust Fund placed
June 28, 2006		US EPA comments to draft PDI workplan received
July 10, 2006	Submit Monthly Progress Report	
July 12, 2006		Sampling of well PZ-6B-U
Aug. 1, 2006		Submit revised PDI Workplan
Aug. 4, 2006	Submit Monthly Progress Report	
Aug. 21, 2006		Commenced with PDI Fieldwork
Aug. 28, 2006		Conditional Approval of PDI Workplan
Sept 8, 2006	Submit Monthly Progress Report	
Sept 18, 2006	Soil Sampling in the MFLBC Flood Plain	
Sept. 27, 2006		Submit Final PDI Workplan incl response to agencies' comments
October 8, 2006	Submit Monthly Progress Report	
Nov 6, 2006	Submit Monthly Progress Report	
Dec 12, 2006	Submit Monthly Progress Report	
Dec 13, 2006	OU-3 Meeting in US EPA Chicago Office	
Jan. 8, 2007	Submit Monthly Progress Report	
Febr. 6, 2007	Submit Monthly Progress Report	
March 7, 2007		Submittal S/S/S Treatability Study Report through Phase III
March 19, 2007	Submit Monthly Progress Report	
March 22, 2007		Submittal Proposal Bio-Treatability Study for Benzene in Groundwater
April 4, 2007	Submit Monthly Progress Report	
May 21, 2007	Submit Monthly Progress Report	

040507

**NEASE CHEMICAL SITE, SALEM, OHIO  
REMOVAL ACTION  
MONTHLY PROGRESS REPORT  
APRIL 2007**

**1.0 INTRODUCTION**

This progress report has been prepared in accordance with Paragraph 14 of the "Order" section of the Administrative Order by Consent (AOC) Docket No. V-W-94-C-212, effective November 17, 1993, regarding a Removal Action for the Nease Chemical Site in Salem, Ohio. The report summarizes the major activities during the month along with investigation results and any problems encountered on the project. Activities planned for next month are also presented.

**2.0 SUMMARY OF ACTIVITIES PERFORMED**

**2.1 PROJECT ACTIVITY**

The activities that were initiated and/or completed during this month are described below. Activities were performed in accordance with the Removal Action AOC.

The agencies and ROC discussed modifications of the existing onsite groundwater treatment system to optimize the protection against spills. ROC summarized the modifications agreed by the parties in a letter to the agencies. The contractor bids were received and were awarded.

One of the four carbon units for water showed a leak in the bottom (corrosion). In agreement with the agencies, it was decided to remove this unit and continue operation with the remaining three units. A new unit was ordered and will be put in place during the next carbon change-out at the end of May.

**2.2 WORK PLAN PREPARATION/REPORTS**

No work plans/reports were submitted this period.

**2.3 FIELDWORK**

**2.3.1 SITE INSPECTIONS**

The results of the monthly site inspection carried out at the site on April 30, 2007 are shown in Attachment 1.

**2.3.2 MONTHLY WATER LEVEL MEASUREMENTS**

Water level measurements in monitoring wells will be taken in June 2007.

**2.3.3 TREATMENT PLANT OPERATION**

The treatment plant operated mostly normal throughout the month.

**2.4.1.1 MEETINGS**

None.

**3.0 VARIATIONS FROM THE APPROVED REMOVAL ACTION WORK PLAN**

None.

#### **4.0 RESULTS OF INSPECTIONS, ENVIRONMENTAL SAMPLING, TESTS AND ANALYSES**

Water monitoring samples were collected from the treatment plant on April 10 and 24 (see Attachments 2 and 3) The next Acute Toxicity Evaluations is planned for May 2007

#### **5.0 PROJECT SCHEDULE**

The updated Work Plan schedule identifies completion and target dates for project activities

#### **6.0 DIFFICULTIES ENCOUNTERED AND ACTION TAKEN TO RESOLVE PROBLEMS**

None

#### **7.0 PERSONNEL CHANGES**

No personnel changes occurred during month

#### **8.0 TYPES AND QUANTITIES OF REMOVED MATERIALS**

For the period from March 1 through 31, 2007 the following material was removed

- 15,700 gallons of leachate and/or backwash water were disposed off-site at a licensed treatment facility
- Approximately 157,681 gallons were pumped from Leachate Collection System 1 (LCS-1) (total for LCS-1 = 20,103,695 gal)
- Approximately 14,511 gallons were pumped from Leachate Collection System 2 (LCS-2) (total for LCS-2 = 1,572,377 gal)
- No water was pumped from Pond 1 (total for the pond = 1,021,138/ gallons)
- Approximately 21 pounds of organic compounds were removed during pumping (estimate based on average VOC/SVOC concentrations for each source)

#### **9.0 ANTICIPATED PROJECT ACTIVITIES FOR MAY 2007**

Removal Action activities scheduled for the upcoming month include on-going implementation of the approved Removal Action Work Plan involving:

- Collection of groundwater from the existing collection systems LCS-1, LCS-2 and Pond 1
- Implementation of planned treatment plant modifications
- Monthly Progress Report for April 2007

052107



**TABLE 1**  
**NEASE CHEMICAL SITE, SALEM, OHIO**  
**REMOVAL ACTION SCHEDULE**

DATE	TASK/ACTIVITY/DELIVERABLE/MILESTONE
	Documentation of the Site Activities through July 31, 2004 can be reviewed in the July 2004 Monthly Progress Report
September 9, 2004	Submit Monthly Progress Report
October 8, 2004	Submit Monthly Progress Report
November 10, 2004	Submit Monthly Progress Report
December 10, 2004	Submit Monthly Progress Report
January 10, 2005	Submit Monthly Progress Report
February 10, 2005	Submit Monthly Progress Report
March 4, 2005	Submit Monthly Progress Report
April 8, 2005	Submit Monthly Progress Report
May 9, 2005	Submit Monthly Progress Report
June 9, 2005	Submit Monthly progress Report
July 8, 2005	Submit Monthly Progress Report
August 10, 2005	Submit Monthly Progress Report
September 9, 2005	Submit Monthly Progress Report
October 10, 2005	Submit Monthly Progress Report
November 9, 2005	Submit Monthly Progress Report
December 8, 2005	Submit Monthly Progress Report
January 9, 2006	Submit Monthly Progress Report
February 8, 2006	Submit Monthly Progress Report
March 15, 2006	Submit Monthly Progress Report
April 10, 2006	Submit Monthly Progress Report
May 8, 2006	Submit Monthly Progress Report
June 8, 2006	Submit Monthly Progress Report
July 10, 2006	Submit Monthly Progress Report
August 4, 2006	Submit Monthly Progress Report
September 8, 2006	Submit Monthly Progress Report
October 8, 2006	Submit Monthly Progress Report
November 6, 2006	Submit Monthly Progress Report
December 12, 2006	Submit Monthly Progress Report
January 8, 2007	Submit Monthly Progress Report
February 6, 2007	Submit Monthly Progress Report
March 19, 2007	Submit Monthly Progress Report
April 4, 2007	Submit Monthly Progress Report
May 21, 2007	Submit Monthly Progress Report

**ATTACHMENT 1**  
**RESULTS OF MONTHLY SITE INSPECTION**  
**NEASE CHEMICAL SITE, SALEM, OHIO**  
**APRIL 2007**

**SITE INSPECTION FORM**  
**RUETGERS-NEASE CORPORATION**  
**Nease Site, Salem, Ohio**

Date of Inspection: 4-30-07

Entry Time: 800 Hrs. Exit Time: 1200 Hrs.

Weather: 60° SUNNY

Inspector's Name: DENNIS L. LANE

Inspector's Company: Howells and Baird, Inc.

**INSPECTION RESULTS**

SPECIFIC OBSERVATIONS: Structures

(Responses: S = Satisfactory U = Unsatisfactory Yes/No Levels Measured in Feet, N/A = Not Applicable)

	Pump	Quick Connect	Water Level	Berm Erosion	Visible Leakage
Leachate Collection System 1 (LCS-1)	S	S	7.11	N/A	No
Leachate Collection System 2 (LCS-2)	S	S	9.64	N/A	No
Pond 1 Pumphouse	S	S	8.50	N/A	No
Pond 1 Berm	N/A	N/A	N/A	No	No
Pond 2 Embankment	N/A	N/A	N/A	No	No
Exclusion Area A Embankment	N/A	N/A	N/A	No	No
Storage Tank	N/A	S	5.23	N/A	No
Other (specify)					

## SPECIFIC OBSERVATIONS:

## Sediment Barriers

## Condition of Sediment Barriers

Barrier ID	Fabric Intact?	By Passing Evident?	Is Maintenance Necessary?
Sediment Control Structure 1	YES	No	No
Sediment Control Structure 2	YES	No	No
Fabric Barrier 2	YES	No	No
Fabric Barrier 3	YES	No	No
Fabric Barrier 4	YES	No	No
Fabric Barrier 5	YES	No	No
Fabric Barrier 8	YES	No	No
Fabric Barrier 9	YES	No	No
Fabric Barrier 10	YES	No	No
Rock Barrier 1	YES	No	No
Rock Barrier 2	YES	No	No
Pond 7 - North	YES	No	No
Pond 7 - South	YES	No	No

## SPECIFIC OBSERVATIONS:

Seeps (if present, use more forms, as necessary)

Seep ID (yr-month-#)	Located on Map	Areal Extent (ft <sup>2</sup> )	Magnitude (flow?, ponding?)
94-7-1	YES	20	Non-Flowing Seep
96-8-2	YES	20	Non-Flowing Seep

Note Seep ID # equal the "nth" observed seep during the yr-month in question

## ADDITIONAL OBSERVATION OR REMARKS:

Inspector's Name:

DENNIS L. LANE

Inspector's Signature:

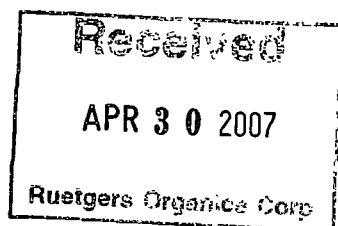
Dennis L. Lane

Date:

4-30-07

**ATTACHMENT 2**

**WATER SAMPLING RESULTS – APRIL 10, 2007  
NEASE CHEMICAL SITE, SALEM, OHIO**



STL

STL North Canton  
4101 Shuffel Drive NW  
North Canton, OH 44720

Tel 330 497 9396 Fax: 330 497 0772  
www.stl-inc.com

## ANALYTICAL REPORT

SALEM, OHIO SITE

Lot #: A7D110124

Dr. Rainer Domalski

Rutgers Organics Corporation  
201 Struble Road  
State College, PA 16801

SEVERN TRENT LABORATORIES, INC.

*Kenneth J. Kuzior*

Kenneth J. Kuzior  
Project Manager

April 25, 2007

## ANALYTICAL METHODS SUMMARY

A7D110124

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Ammonia Nitrogen	MCAWW 350.2
Nitrate as N	MCAWW 300.0A
Nitrite as N	MCAWW 300.0A
Total phosphorus	MCAWW 365.2

### References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.

## SAMPLE SUMMARY

A7D110124

WO #	SAMPLE#	CLIENT	SAMPLE ID	SAMPLED DATE	SAMP TIME
JTNM4	001	INFLUENT	4-10-07	04/10/07	13:00
JTNM6	002	OUTFALL	4-10-07	04/10/07	13:00

### NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages
- All calculations are performed before rounding to avoid round-off errors in calculated results
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight



Rutgers Organics Corporation

Client Sample ID: INFLUENT 4-10-07

General Chemistry

Lot-Sample #...: A7D110124-001    Work Order #...: JTNM4    Matrix.....: WG  
 Date Sampled...: 04/10/07 13:00    Date Received...: 04/11/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	04/12/07	7103079
		Dilution Factor: 1				
Nitrite as N	ND	0.10	mg/L	MCAWW 300.0A	04/12/07	7103080
		Dilution Factor: 1				
Nitrogen, as Ammonia	ND	2.0	mg/L	MCAWW 350.2	04/19/07	7109304
		Dilution Factor: 1				
Total phosphorus	0.1	0.1	mg/L	MCAWW 365.2	04/18/07	7106229
		Dilution Factor: 1				

Rutgers Organics Corporation

Client Sample ID: OUTFALL 4-10-07

General Chemistry

Lot-Sample #...: A7D110124-002    Work Order #...: JTNM6    Matrix.....: WG  
 Date Sampled...: 04/10/07 13:00    Date Received...: 04/11/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	04/12/07	7103079
		Dilution Factor: 1				
Nitrite as N	ND	0.10	mg/L	MCAWW 300.0A	04/12/07	7103080
		Dilution Factor: 1				
Nitrogen, as Ammonia	ND	2.0	mg/L	MCAWW 350.2	04/19/07	7109304
		Dilution Factor: 1				
Total phosphorus	0.2	0.1	mg/L	MCAWW 365.2	04/18/07	7106229
		Dilution Factor: 1				

**ATTACHMENT 3**

**WATER SAMPLING RESULTS – APRIL 24, 2007  
NEASE CHEMICAL SITE, SALEM, OHIO**

4-24-07



STL

STL North Canton  
4101 Shuffel Drive NW  
North Canton, OH 44720

Tel. 330 497 9396 Fax 330 497 0772  
www.stl-inc.com

## ANALYTICAL REPORT

SALEM, OHIO SITE

Lot #: A7D250253

Dr. Rainer Domalski

Rutgers Organics Corporation  
201 Struble Road  
State College, PA 16801

SEVERN TRENT LABORATORIES, INC.

A handwritten signature in black ink, appearing to read "Kenneth J. Kuzior".

Kenneth J. Kuzior  
Project Manager

May 17, 2007

## ANALYTICAL METHODS SUMMARY

A7D250253

PARAMETER	ANALYTICAL METHOD
pH Aqueous	SW846 9040B
Ammonia Nitrogen	MCAWW 350.2
Biochemical Oxygen Demand	MCAWW 405.1
Chemical Oxygen Demand	MCAWW 410.4
Filterable Residue (TDS)	MCAWW 160.1
Free Cyanide	SM18 4500-CN-I
ICP-MS (6020)	SW846 6020
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
N-Hexane Extractable Material (1664A)	CFR136A 1664A HEM
Non-Filterable Residue (TSS)	MCAWW 160.2
Organochlorine Pesticides	SW846 8081A
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Total Organic Carbon	SW846 9060
Volatile Organics by GC/MS	SW846 8260B
Volatile Organics by TO14 A (Low Level)	EPA-2 TO-14A

### References:

- CFR136A "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
- EPA-2 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA-625/R-96/010b, January 1999.
- MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
- SM18 "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

## SAMPLE SUMMARY

A7D250253

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JVL3E	001	INFLUENT 4-24-07	04/24/07	13:00
JVL3J	002	LGAC 2-3-4-24-07	04/24/07	13:00
JVL3P	003	OUTFALL 4-24-07	04/24/07	13:00
JVL30	004	TRIP BLANK	04/24/07	
JVL33	005	AGAC 1-2-4-24-07	04/24/07	13:00
JVL35	006	AGAC-F-4-24-07	04/24/07	13:00

### NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages
- All calculations are performed before rounding to avoid round-off errors in calculated results
- Results noted as "ND" were not detected at or above the stated limit
- This report must not be reproduced, except in full, without the written approval of the laboratory
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

Rutgers Organics Corporation

Client Sample ID: INFLUENT 4-24-07

GC/MS Volatiles

Lot-Sample #....: A7D250253-001    Work Order #....: JVL3E1AE    Matrix.....: WG  
 Date Sampled....: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/28/07    Analysis Date...: 04/28/07  
 Prep Batch #....: 7120291  
 Dilution Factor: 500    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	680 J,B	5000	ug/L
Benzene	500	500	ug/L
Bromobenzene	ND	500	ug/L
Bromochloromethane	ND	500	ug/L
Bromodichloromethane	ND	500	ug/L
Bromoform	ND	500	ug/L
Bromomethane	ND	500	ug/L
2-Butanone	ND	5000	ug/L
n-Butylbenzene	ND	500	ug/L
sec-Butylbenzene	ND	500	ug/L
tert-Butylbenzene	ND	500	ug/L
Carbon tetrachloride	ND	500	ug/L
Chlorobenzene	340 J	500	ug/L
Dibromochloromethane	ND	500	ug/L
Chloroethane	ND	500	ug/L
Chloroform	85 J	500	ug/L
Chloromethane	ND	500	ug/L
2-Chlorotoluene	ND	500	ug/L
4-Chlorotoluene	ND	500	ug/L
1,2-Dibromoethane	ND	500	ug/L
Dibromomethane	ND	500	ug/L
1,2-Dichlorobenzene	11000	500	ug/L
1,3-Dichlorobenzene	ND	500	ug/L
1,4-Dichlorobenzene	ND	500	ug/L
Dichlorodifluoromethane	ND	500	ug/L
1,1-Dichloroethane	ND	500	ug/L
1,2-Dichloroethane	290 J	500	ug/L
cis-1,2-Dichloroethene	16000	500	ug/L
trans-1,2-Dichloroethene	ND	500	ug/L
1,1-Dichloroethene	ND	500	ug/L
1,2-Dichloropropane	ND	500	ug/L
1,3-Dichloropropane	ND	500	ug/L
2,2-Dichloropropane	ND	500	ug/L
cis-1,3-Dichloropropene	ND	500	ug/L
trans-1,3-Dichloropropene	ND	500	ug/L
1,1-Dichloropropene	ND	500	ug/L
Ethylbenzene	ND	500	ug/L
Isopropylbenzene	ND	500	ug/L
p-Isopropyltoluene	ND	500	ug/L

(Continued on next page)

Rutgers Organics Corporation

Client Sample ID: INFLUENT 4-24-07

GC/MS Volatiles

Lot-Sample #...: A7D250253-001 Work Order #...: JVL3E1AE Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methylene chloride	ND	500	ug/L
n-Propylbenzene	ND	500	ug/L
Styrene	ND	500	ug/L
1,1,1,2-Tetrachloroethane	ND	500	ug/L
1,1,2,2-Tetrachloroethane	370 J	500	ug/L
Tetrachloroethene	860	500	ug/L
Toluene	ND	500	ug/L
1,1,1-Trichloroethane	ND	500	ug/L
1,1,2-Trichloroethane	ND	500	ug/L
Trichloroethene	460 J	500	ug/L
Trichlorofluoromethane	ND	500	ug/L
1,2,3-Trichloropropane	ND	500	ug/L
1,2,4-Trimethylbenzene	ND	500	ug/L
1,3,5-Trimethylbenzene	ND	500	ug/L
Vinyl chloride	550	500	ug/L
m-Xylene & p-Xylene	ND	1000	ug/L
o-Xylene	ND	500	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	109	(73 - 122)
1,2-Dichloroethane-d4	105	(61 - 128)
Toluene-d8	86	(76 - 110)
4-Bromofluorobenzene	87	(74 - 116)

NOTE(S) :

J Estimated result Result is less than RL

B Method blank contamination The associated method blank contains the target analyte at a reportable level



Rutgers Organics Corporation

Client Sample ID: INFLUENT 4-24-07

GC/MS Semivolatiles

Lot-Sample #....: A7D250253-001    Work Order #....: JVL3E1AG    Matrix.....: WG  
 Date Sampled...: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/26/07    Analysis Date...: 05/01/07  
 Prep Batch #....: 7116370  
 Dilution Factor: 10    Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Anthracene	ND	100	ug/L
Benzo(a)anthracene	ND	100	ug/L
Benzo(b)fluoranthene	ND	100	ug/L
Benzo(k)fluoranthene	ND	100	ug/L
Benzo(ghi)perylene	ND	100	ug/L
Benzo(a)pyrene	ND	100	ug/L
Butyl benzyl phthalate	ND	100	ug/L
Chrysene	ND	100	ug/L
Dibenz(a,h)anthracene	ND	100	ug/L
Di-n-butyl phthalate	ND	100	ug/L
<b>1,2-Dichlorobenzene</b>	<b>4100 E</b>	<b>100</b>	<b>ug/L</b>
1,3-Dichlorobenzene	ND	100	ug/L
<b>1,4-Dichlorobenzene</b>	<b>100</b>	<b>100</b>	<b>ug/L</b>
Dimethyl phthalate	ND	100	ug/L
Fluorene	ND	100	ug/L
Indeno(1,2,3-cd)pyrene	ND	100	ug/L
2-Methylnaphthalene	ND	100	ug/L
4-Methylphenol	ND	100	ug/L
Naphthalene	ND	100	ug/L
Phenanthrene	ND	100	ug/L
Phenol	ND	100	ug/L
Pyrene	ND	100	ug/L
<b>Phenyl sulfone</b>	<b>290</b>	<b>20</b>	<b>ug/L</b>
3,4-Dichloronitrobenzene	ND	100	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85 DIL	(27 - 111)
2-Fluorobiphenyl	84 DIL	(28 - 110)
Terphenyl-d14	93 DIL	(37 - 119)
Phenol-d5	74 DIL	(10 - 110)
2-Fluorophenol	71 DIL	(10 - 110)
2,4,6-Tribromophenol	72 DIL	(22 - 120)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes

E Estimated result. Result concentration exceeds the calibration range

Rutgers Organics Corporation

Client Sample ID: INFLUENT 4-24-07

GC/MS Semivolatiles

Lot-Sample #....: A7D250253-001    Work Order #....: JVL3E2AG    Matrix.....: WG  
 Date Sampled....: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/26/07    Analysis Date...: 05/01/07  
 Prep Batch #....: 7116370  
 Dilution Factor: 250    Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Anthracene	ND	2500	ug/L
Benzo(a)anthracene	ND	2500	ug/L
Benzo(b)fluoranthene	ND	2500	ug/L
Benzo(k)fluoranthene	ND	2500	ug/L
Benzo(ghi)perylene	ND	2500	ug/L
Benzo(a)pyrene	ND	2500	ug/L
Butyl benzyl phthalate	ND	2500	ug/L
Chrysene	ND	2500	ug/L
Dibenz(a,h)anthracene	ND	2500	ug/L
Di-n-butyl phthalate	ND	2500	ug/L
<b>1,2-Dichlorobenzene</b>	<b>8000</b>	<b>2500</b>	<b>ug/L</b>
1,3-Dichlorobenzene	ND	2500	ug/L
1,4-Dichlorobenzene	ND	2500	ug/L
Dimethyl phthalate	ND	2500	ug/L
Fluorene	ND	2500	ug/L
Indeno(1,2,3-cd)pyrene	ND	2500	ug/L
2-Methylnaphthalene	ND	2500	ug/L
4-Methylphenol	ND	2500	ug/L
Naphthalene	ND	2500	ug/L
Phenanthrene	ND	2500	ug/L
Phenol	ND	2500	ug/L
Pyrene	ND	2500	ug/L
<b>Phenyl sulfone</b>	<b>250 J</b>	<b>500</b>	<b>ug/L</b>
3,4-Dichloronitrobenzene	ND	2500	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	0.0 DIL, *	(27 - 111)
2-Fluorobiphenyl	0.0 DIL, *	(28 - 110)
Terphenyl-d14	0.0 DIL, *	(37 - 119)
Phenol-d5	0.0 DIL, *	(10 - 110)
2-Fluorophenol	0.0 DIL, *	(10 - 110)
2,4,6-Tribromophenol	0.0 DIL, *	(22 - 120)

**NOTE(S) :**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes

\* Surrogate recovery is outside stated control limits.

J Estimated result Result is less than RL

Client Sample ID: INFLUENT 4-24-07

Lot-Sample #...: A7D250253-001      Work Order #...: JVL3E      Matrix.....: WG  
Date Sampled...: 04/24/07 13:00      Date Received..: 04/25/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH (liquid)	6.8		No Units	SW846 9040B	04/25/07	7115469
		Dilution Factor: 1				
Total Dissolved Solids	490	10	mg/L	MCAWW 160.1	04/27-04/28/07	7117271
		Dilution Factor: 1				
Total Suspended Solids	100	4.0	mg/L	MCAWW 160.2	04/26/07	7116179
		Dilution Factor: 1				

Rutgers Organics Corporation

Client Sample ID: LGAC 2-3-4-24-07

GC/MS Volatiles

Lot-Sample #....: A7D250253-002    Work Order #....: JVL3J1AE    Matrix.....: WG  
 Date Sampled....: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/27/07    Analysis Date...: 04/27/07  
 Prep Batch #....: 7120287  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	1.0 J,B	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
2-Butanone	ND	10	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	0.37 J	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

(Continued on next page)

Rutgers Organics Corporation

Client Sample ID: LGAC 2-3-4-24-07

GC/MS Volatiles

Lot-Sample #...: A7D250253-002 Work Order #...: JVL3J1AE Matrix.....: WG

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Methylene chloride	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Dibromofluoromethane	108	(73 - 122)
1,2-Dichloroethane-d4	109	(61 - 128)
Toluene-d8	87	(76 - 110)
4-Bromofluorobenzene	83	(74 - 116)

NOTE(S) :

J Estimated result Result is less than RL.

B Method blank contamination The associated method blank contains the target analyte at a reportable level

Rutgers Organics Corporation

Client Sample ID: LGAC 2-3-4-24-07

General Chemistry

Lot-Sample #...: A7D250253-002    Work Order #...: JVL3J    Matrix.....: WG  
 Date Sampled...: 04/24/07 13:00    Date Received...: 04/25/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH (liquid)	7.6		No Units	SW846 9040B	04/25/07	7115469
			Dilution Factor: 1			
Total Dissolved Solids	510	10	mg/L	MCAWW 160.1	04/27-04/28/07	7117271
			Dilution Factor: 1			
Total Suspended Solids	10	4.0	mg/L	MCAWW 160.2	04/26/07	7116179
			Dilution Factor: 1			

Rutgers Organics Corporation

Client Sample ID: OUTFALL 4-24-07

GC/MS Volatiles

Lot-Sample #....: A7D250253-003    Work Order #....: JVL3P1AE    Matrix.....: WG  
 Date Sampled....: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/27/07    Analysis Date...: 04/27/07  
 Prep Batch #....: 7120287  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
2-Butanone	ND	10	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

(Continued on next page)

Rutgers Organics Corporation

Client Sample ID: OUTFALL 4-24-07

GC/MS Volatiles

Lot-Sample #....: A7D250253-003    Work Order #....: JVL3P1AE    Matrix.....: WG

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Methylene chloride	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	109	(73 - 122)
1,2-Dichloroethane-d4	110	(61 - 128)
Toluene-d8	87	(76 - 110)
4-Bromofluorobenzene	85	(74 - 116)



Rutgers Organics Corporation

Client Sample ID: OUTFALL 4-24-07

GC/MS Semivolatiles

Lot-Sample #...: A7D250253-003    Work Order #...: JVL3P1AG    Matrix.....: WG  
 Date Sampled...: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/26/07    Analysis Date...: 05/01/07  
 Prep Batch #...: 7116370  
 Dilution Factor: 1    Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Anthracene	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Butyl benzyl phthalate	ND	10	ug/L
Chrysene	ND	10	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L
Di-n-butyl phthalate	ND	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L
1,4-Dichlorobenzene	ND	10	ug/L
Dimethyl phthalate	ND	10	ug/L
Fluorene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
2-Methylnaphthalene	ND	10	ug/L
4-Methylphenol	ND	10	ug/L
Naphthalene	ND	10	ug/L
Phenanthrene	ND	10	ug/L
Phenol	ND	10	ug/L
Pyrene	ND	10	ug/L
Phenyl sulfone	ND	2.0	ug/L
3,4-Dichloronitrobenzene	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(27 - 111)
2-Fluorobiphenyl	70	(28 - 110)
Terphenyl-d14	96	(37 - 119)
Phenol-d5	71	(10 - 110)
2-Fluorophenol	72	(10 - 110)
2,4,6-Tribromophenol	61	(22 - 120)

Rutgers Organics Corporation

Client Sample ID: OUTFALL 4-24-07

GC Semivolatiles

Lot-Sample #...: A7D250253-003    Work Order #...: JVL3P1AL    Matrix.....: WG  
 Date Sampled...: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/29/07    Analysis Date...: 05/01/07  
 Prep Batch #...: 7118050  
 Dilution Factor: 1    Method.....: SW846 8081A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Methoxychlor	ND	0.10	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	77	(39 - 130)
Decachlorobiphenyl	79	(10 - 147)

**Rutgers Organics Corporation**

**Client Sample ID: OUTFALL 4-24-07**

**TOTAL Metals**

**Lot-Sample #...: A7D250253-003**

**Matrix.....: WG**

**Date Sampled...: 04/24/07 13:00 Date Received...: 04/25/07**

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #...: 7116022</b>						
Aluminum	ND	0.050	mg/L	SW846 6020	04/26-05/01/07	JVL3P1AQ
		Dilution Factor: 1				
Antimony	ND	0.0020	mg/L	SW846 6020	04/26-05/01/07	JVL3P1AR
		Dilution Factor: 1				
<b>Arsenic</b>	<b>0.014</b>	<b>0.0010</b>	<b>mg/L</b>	<b>SW846 6020</b>	<b>04/26-05/01/07</b>	<b>JVL3P1AT</b>
		Dilution Factor: 1				
Beryllium	ND	0.0010	mg/L	SW846 6020	04/26-05/01/07	JVL3P1AU
		Dilution Factor: 1				
Cadmium	ND	0.0010	mg/L	SW846 6020	04/26-05/01/07	JVL3P1AV
		Dilution Factor: 1				
Chromium	ND	0.0020	mg/L	SW846 6020	04/26-05/01/07	JVL3P1AW
		Dilution Factor: 1				
Copper	ND	0.0020	mg/L	SW846 6020	04/26-05/01/07	JVL3P1AX
		Dilution Factor: 1				
<b>Iron</b>	<b>1.6</b>	<b>0.020</b>	<b>mg/L</b>	<b>SW846 6020</b>	<b>04/26-05/01/07</b>	<b>JVL3P1A0</b>
		Dilution Factor: 1				
Lead	ND	0.0010	mg/L	SW846 6020	04/26-05/01/07	JVL3P1A1
		Dilution Factor: 1				
<b>Nickel</b>	<b>0.0058</b>	<b>0.0020</b>	<b>mg/L</b>	<b>SW846 6020</b>	<b>04/26-05/01/07</b>	<b>JVL3P1A2</b>
		Dilution Factor: 1				
Silver	ND	0.0010	mg/L	SW846 6020	04/26-05/01/07	JVL3P1A3
		Dilution Factor: 1				
Thallium	ND	0.0010	mg/L	SW846 6020	04/26-05/01/07	JVL3P1A4
		Dilution Factor: 1				
Zinc	ND	0.010	mg/L	SW846 6020	04/26-05/01/07	JVL3P1A5
		Dilution Factor: 1				
Mercury	ND	0.00020	mg/L	SW846 7470A	04/26/07	JVL3P1A6
		Dilution Factor: 1				

Rutgers Organics Corporation

Client Sample ID: OUTFALL 4-24-07

General Chemistry

Lot-Sample #...: A7D250253-003    Work Order #...: JVL3P    Matrix.....: WG  
Date Sampled...: 04/24/07 13:00    Date Received...: 04/25/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	5.0	mg/L	CFR136A 1664A HEM	04/27/07	7117307
		Dilution Factor: 1				
pH (liquid)	7.7		No Units	SW846 9040B	04/25/07	7115469
		Dilution Factor: 1				
Biochemical Oxygen Demand (BOD)	ND	2	mg/L	MCAWW 405.1	04/26-05/01/07	7116555
		Dilution Factor: 1				
Chemical Oxygen Demand (COD)	ND	20	mg/L	MCAWW 410.4	04/30/07	7120395
		Dilution Factor: 1				
Cyanide (Free)	ND	0.010	mg/L	SM18 4500-CN-I	04/28/07	7118111
		Dilution Factor: 1				
Nitrogen, as Ammonia	ND	2.0	mg/L	MCAWW 350.2	05/01/07	7121226
		Dilution Factor: 1				
Total Dissolved Solids	480	10	mg/L	MCAWW 160.1	04/27-04/28/07	7117271
		Dilution Factor: 1				
Total Organic Carbon	ND	1	mg/L	SW846 9060	04/30/07	7121054
		Dilution Factor: 1				
Total Suspended Solids	6.0	4.0	mg/L	MCAWW 160.2	04/26/07	7116179
		Dilution Factor: 1				

Rutgers Organics Corporation

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #....: A7D250253-004      Work Order #....: JVL301AA      Matrix.....: WQ  
 Date Sampled....: 04/24/07      Date Received...: 04/25/07  
 Prep Date.....: 04/27/07      Analysis Date...: 04/27/07  
 Prep Batch #....: 7120287  
 Dilution Factor: 1      Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	4.4 J,B	10	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
2-Butanone	ND	10	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

(Continued on next page)

Rutgers Organics Corporation

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: A7D250253-004 Work Order #...: JVL301AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methylene chloride	0.84 J,B	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(73 - 122)
1,2-Dichloroethane-d4	110	(61 - 128)
Toluene-d8	90	(76 - 110)
4-Bromofluorobenzene	88	(74 - 116)

**NOTE(S) :**

J Estimated result Result is less than RL

B Method blank contamination The associated method blank contains the target analyte at a reportable level

Rutgers Organics Corporation

Client Sample ID: AGAC 1-2-4-24-07

GC/MS Volatiles

Lot-Sample #....: A7D250253-005    Work Order #....: JVL331AA    Matrix.....: AA  
 Date Sampled....: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/27/07    Analysis Date...: 04/28/07  
 Prep Batch #....: 7120463  
 Dilution Factor: 2.5    Method.....: EPA-2 TO-14A

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	0.50	ppb (v/v)
Bromodichloromethane	ND	0.50	ppb (v/v)
Bromoform	ND	0.50	ppb (v/v)
Carbon tetrachloride	ND	0.50	ppb (v/v)
Chlorobenzene	ND	0.50	ppb (v/v)
Dibromochloromethane	ND	0.50	ppb (v/v)
Chloroethane	ND	0.50	ppb (v/v)
Chloroform	ND	0.50	ppb (v/v)
1,2-Dibromoethane (EDB)	ND	0.50	ppb (v/v)
Dibromomethane	ND	1.0	ppb (v/v)
<b>1,2-Dichlorobenzene</b>	<b>4.6</b>	<b>0.50</b>	<b>ppb (v/v)</b>
1,3-Dichlorobenzene	ND	0.50	ppb (v/v)
1,4-Dichlorobenzene	ND	0.50	ppb (v/v)
Dichlorodifluoromethane	ND	0.50	ppb (v/v)
1,1-Dichloroethane	ND	0.50	ppb (v/v)
1,2-Dichloroethane	ND	0.50	ppb (v/v)
cis-1,2-Dichloroethene	ND	0.50	ppb (v/v)
trans-1,2-Dichloroethene	ND	0.50	ppb (v/v)
1,1-Dichloroethene	ND	0.50	ppb (v/v)
1,2-Dichloropropane	ND	0.50	ppb (v/v)
cis-1,3-Dichloropropene	ND	0.50	ppb (v/v)
trans-1,3-Dichloropropene	ND	0.50	ppb (v/v)
Ethylbenzene	ND	0.50	ppb (v/v)
Cumene	ND	1.0	ppb (v/v)
n-Propylbenzene	ND	1.0	ppb (v/v)
Styrene	ND	0.50	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND	0.50	ppb (v/v)
Tetrachloroethene	ND	0.50	ppb (v/v)
Toluene	ND	0.50	ppb (v/v)
1,1,1-Trichloroethane	ND	0.50	ppb (v/v)
1,1,2-Trichloroethane	ND	0.50	ppb (v/v)
Trichloroethene	ND	0.50	ppb (v/v)
Trichlorofluoromethane	ND	0.50	ppb (v/v)
1,2,3-Trichloropropane	ND	1.2	ppb (v/v)
1,3,5-Trimethylbenzene	ND	0.50	ppb (v/v)
Vinyl chloride	ND	0.50	ppb (v/v)
m-Xylene & p-Xylene	ND	0.50	ppb (v/v)
o-Xylene	ND	0.50	ppb (v/v)

(Continued on next page)

Rutgers Organics Corporation

Client Sample ID: AGAC 1-2-4-24-07

GC/MS Volatiles

Lot-Sample #...: A7D250253-005    Work Order #...: JVL331AA    Matrix.....: AA

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
1,2-Dichloroethane-d4	96	(70 - 130)
Toluene-d8	104	(70 - 130)
4-Bromofluorobenzene	97	(70 - 130)



Rutgers Organics Corporation

Client Sample ID: AGAC-F-4-24-07

GC/MS Volatiles

Lot-Sample #....: A7D250253-006    Work Order #....: JVL351AA    Matrix.....: AA  
 Date Sampled...: 04/24/07 13:00    Date Received...: 04/25/07  
 Prep Date.....: 04/27/07    Analysis Date...: 04/28/07  
 Prep Batch #....: 7120463  
 Dilution Factor: 2.5    Method.....: EPA-2 TO-14A

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	0.50	ppb (v/v)
Bromodichloromethane	ND	0.50	ppb (v/v)
Bromoform	ND	0.50	ppb (v/v)
Carbon tetrachloride	ND	0.50	ppb (v/v)
Chlorobenzene	ND	0.50	ppb (v/v)
Dibromochloromethane	ND	0.50	ppb (v/v)
Chloroethane	ND	0.50	ppb (v/v)
Chloroform	ND	0.50	ppb (v/v)
1,2-Dibromoethane (EDB)	ND	0.50	ppb (v/v)
Dibromomethane	ND	1.0	ppb (v/v)
<b>1,2-Dichlorobenzene</b>	<b>3.7</b>	<b>0.50</b>	<b>ppb (v/v)</b>
1,3-Dichlorobenzene	ND	0.50	ppb (v/v)
1,4-Dichlorobenzene	ND	0.50	ppb (v/v)
Dichlorodifluoromethane	ND	0.50	ppb (v/v)
1,1-Dichloroethane	ND	0.50	ppb (v/v)
1,2-Dichloroethane	ND	0.50	ppb (v/v)
cis-1,2-Dichloroethene	ND	0.50	ppb (v/v)
trans-1,2-Dichloroethene	ND	0.50	ppb (v/v)
1,1-Dichloroethene	ND	0.50	ppb (v/v)
1,2-Dichloropropane	ND	0.50	ppb (v/v)
cis-1,3-Dichloropropene	ND	0.50	ppb (v/v)
trans-1,3-Dichloropropene	ND	0.50	ppb (v/v)
Ethylbenzene	ND	0.50	ppb (v/v)
Cumene	ND	1.0	ppb (v/v)
n-Propylbenzene	ND	1.0	ppb (v/v)
Styrene	ND	0.50	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND	0.50	ppb (v/v)
Tetrachloroethene	ND	0.50	ppb (v/v)
Toluene	ND	0.50	ppb (v/v)
1,1,1-Trichloroethane	ND	0.50	ppb (v/v)
1,1,2-Trichloroethane	ND	0.50	ppb (v/v)
Trichloroethene	ND	0.50	ppb (v/v)
Trichlorofluoromethane	ND	0.50	ppb (v/v)
1,2,3-Trichloropropane	ND	1.2	ppb (v/v)
1,3,5-Trimethylbenzene	ND	0.50	ppb (v/v)
Vinyl chloride	ND	0.50	ppb (v/v)
m-Xylene & p-Xylene	ND	0.50	ppb (v/v)
o-Xylene	ND	0.50	ppb (v/v)

(Continued on next page)

Rutgers Organics Corporation

Client Sample ID: AGAC-F-4-24-07

GC/MS Volatiles

Lot-Sample #...: A7D250253-006    Work Order #...: JVL351AA    Matrix.....: AA

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	98	(70 - 130)
Toluene-d8	106	(70 - 130)
4-Bromofluorobenzene	97	(70 - 130)